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August 29, 2005

Job No. 1222.01

Edward and Margaret Gilmore
27 Rancheria Road
Kentfield, California 94904

**Subject: Site Conceptual Model
 Royal Coach Car Wash / 7360 Commerce Blvd., Santa Rosa, California
 SCDHS-EHD Site # 00001357; NCRWQCB Site #1TSO509**

Dear Mr. and Mrs. Gilmore:

This report presents Trans Tech Consultants (TTC) Site Conceptual Model (SCM) for the Royal Coach Car Wash located at 7360 Commerce Blvd., in Cotati, California. The subject site is approximately located as shown on the Site Location Map, Plate 1. The SCM was recommended in our January 10, 2005 Results of Investigation Report and concurred upon in a February 3, 2005 letter from Mr. Dale Radford of the Sonoma County Department of Health Services- Environmental Health Division (SCDHS-EHD). The purpose of the SCM is to present a summation of available site data, to present new relative site data and to provide evaluations on the distributions of chemicals in time and space. The SCM also identifies known potential receptors, as well as, potential future receptors, and identifies potential environmental issues to investigate. At the conclusion of the SCM we provide recommendations relative to additional site investigations and remediation.

Site Description

The site consists of approximately 0.65 acres and is used as a motor fueling station and car wash facility. The site is located in an area of commercial and residential development. The site is bounded to the west by Commerce Boulevard, to the south by a restaurant, to the east by residential housing, and to the north by a flood control channel. The site topography is generally flat with onsite waters generally draining to the west.

Published geologic data indicates the site is underlain by Quaternary-age interfluvial marsh like basin deposits, consisting mainly of poorly sorted dark clay and silty clay both presumably rich in organic matter. Our investigations into the relatively shallow soils indicates the deposits consist mainly of clay and silty clay, with some interbedded sands. The first encountered groundwater at the site generally occurs between 8 and 15 feet below grade (BG) and a secondary aquifer has been identified between approximately 45 and 55 feet BG. The groundwater flow within the first encountered groundwater has varied over the years with the most consistent direction being northerly towards the

flood channel. The groundwater flow within the secondary aquifer has consistently been measured to the west / northwest. Historical Flow Direction and Gradient Data from the Shallow and Deep wells are presented in Appendix A and B.

Background

We understand that in February 1992, Petro Tech of Santa Rosa, California, upgraded the product line piping that extends from the three existing underground storage tanks (UST's) to the two pump islands. On February 20, 1992, Petro Tech collected five soil samples 30 inches BG, from the bottom of the trench excavations. The soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (g) and benzene, toluene, ethylbenzene, and xylenes (BTEX). TPH-g was detected as high as 1,500 milligrams per kilogram (mg/Kg) in the soil samples.

On May 3, 1993, TTC conducted a preliminary site investigation consisting of drilling five soil borings adjacent to the soil sample locations by Petro Tech. We observed Clear Heart Drilling of Santa Rosa, California (Clear Heart) advance borings B-1 through B-5, at the approximate locations indicated on the Site Plan, Plate 2. Twelve soil samples and two grab groundwater samples were obtained for laboratory chemical analysis. The results of the investigation were presented in TTC's Summary Report of Investigations dated June 2, 1993. The laboratory chemical results of the soil samples are presented in Appendix C and groundwater sample results are presented in Appendix D.

On February 22, 23 and 24, 1994, TTC conducted a fuel release investigation consisting of drilling twelve soil borings and converting five of the borings into groundwater monitoring wells. Clear Heart advanced borings B-6 through B-17 at the approximate locations indicated on Plate 2. Borings B-7, B-11, B-13, B-14, and B-17 were completed as 2-inch monitoring wells (MW-1 through MW-5). The wells were developed and sampled on February 28 and March 3, 1994, respectively. Soil samples obtained from the borings and groundwater samples obtained from the monitoring wells were submitted for laboratory chemical analysis. The results of the investigation were presented in TTC's Summary Report of Investigation dated May 16, 1994. The laboratory chemical results of the soil samples are presented in Appendix C and groundwater sample results are presented in Appendix D.

A subsequent June 17, 1996 Work Plan for a Phase 2 Investigation proposing additional onsite test borings and a monitoring well on Commerce Boulevard was submitted by BCW Environmental Consulting (BCW). The additional onsite test borings B-18 through B-20 were advanced on April 12, 2000, by Clear Heart and the monitoring well (MW-6) was installed on Commerce Boulevard by Weeks Drilling and Pump Company on November 22, 2000. The locations of the test borings and monitoring well are shown on Plate 2. The laboratory analytical results of the soil and groundwater samples collected during the investigation were presented in TTC's Summary Report



dated January 9, 2001. The laboratory chemical results of the soil samples are presented in Appendix C and groundwater sample results are presented in Appendix D.

In April of 2002, TTC prepared a work plan to further assess the impact to soil and groundwater along the southwestern property boundary. The investigation was performed on August 20, 2002 and consisted of installing one 2" groundwater monitoring well (MW-7) at the approximate location shown on Plate 2. The analytical results of the investigation indicated that the southerly extent of the soil and groundwater impact was not defined and that impact in MW-7 was significant. The laboratory chemical results of the soil and groundwater samples collected during the investigation were presented in our Summary Report dated October 30, 2002. The laboratory chemical results for the soil samples are presented in Appendix C and the groundwater sample results are presented in Appendix D.

On September 16, 2003, Gregg Drilling of Martinez, California performed two cone penetration tests (CPT's), CPT-1 and CPT-2, at the approximate locations shown on Plate 2. The CPT's were advanced to approximately 70 feet BGS and grab groundwater samples were collected from a second water bearing zone identified between 46 and 53 feet BGS. The analytical results of the samples collected indicated that impact from petroleum hydrocarbons, including methyl tert butyl ether (MTBE) was being detected in the sample collected from the northern end of the site. The analytical results from the groundwater samples collected during the investigation were presented in our Summary Report of Investigation dated November 5, 2003. The laboratory chemical results for the groundwater samples collected are presented in Appendix E.

On October 3, 2003, Gregg Drilling advanced one soil boring (B-21) and completed one monitoring well (MW-8) at the approximate locations shown on Plate 2. One additional monitoring well was proposed but was not installed due to underground utility constraints. The analytical results of the soil and groundwater samples collected indicated that the lateral extent of MTBE was not completely defined to the north and that additional delineation efforts may be needed. The analytical results from the soil and groundwater samples collected during the investigation were presented in our Summary Report of Investigation dated November 5, 2003. The laboratory chemical results for the soil samples are presented in Appendix C and the groundwater sample results are presented in Appendix D.

On February 25, 2004 Gregg Drilling performed three additional CPT's (CPT-3 through CPT-5) at the approximate locations shown on Plate 2. The purpose of the additional CPT's was to confirm the results of the previous CPT sample analysis and to further delineate the lateral extent of impact in the secondary water bearing zone. The analytical results of the CPT investigation were reported in our Summary Report of Investigation dated April 15, 2004. The laboratory chemical results for the groundwater samples collected are presented in Appendix E.



On March 16, 2004, Gregg Drilling advanced two soil boring (B-22 and B-23) and one groundwater monitoring well (MW-9) at the approximate locations shown on Plate 2. The borings and well were drilled to further delineate the lateral extent of shallow groundwater impact at the site in the vicinity of B-21, and south of MW-7. The results of the investigation indicated that the extent of shallow groundwater impact was defined to the north and south of the site. The analytical results of the soil and groundwater samples collected during the investigation were also reported in our Summary Report of Investigations dated April 15, 2004. The laboratory chemical results for the soil samples are presented in Appendix C and the groundwater sample results are presented in Appendix D.

From November 8, through November 12, and November 15, 2005 Gregg Drilling and a Professional Geologist from TTC were at the subject site to install three groundwater monitoring wells (MW-1D through MW-3D) at the approximate locations shown on Plate 2. The monitoring wells were installed into the secondary aquifer previously identified and sampled during both CPT investigations. The wells were installed to total depths between 56 and 58 feet BG. Steel conductor casing was used to seal off the first encountered groundwater and the wells were screened in the secondary aquifer only. The analytical results of the soil and groundwater samples collected from the deeper monitoring wells indicates that the impact from petroleum hydrocarbons and oxygenated fuel additives including MTBE has been confirmed in the secondary aquifer. The analytical results of the soil and groundwater samples collected during the investigation were presented in our Summary Report of Investigation dated January 10, 2005. The laboratory chemical results for the soil samples are presented in Appendix C and the groundwater sample results are presented in Appendix D.

Based on the results of the investigation, we recommended that the three deep wells (MW-1D through MW-3D) continue to be sampled on a quarterly basis and concurrent with the existing shallow wells (MW-1 through MW-9) for the period of one year. The quarterly sampling provides data to establish trends in contaminant concentrations and to determine a consistent groundwater flow direction in the secondary aquifer. Since the installation monitoring wells MW-1D through MW-3D we have sampled the wells three times. Petroleum hydrocarbon impact in the secondary aquifer has not been detected during the last two sampling events. However, impact from MTBE and BTEX constituents have been detected during each sampling event. The historical quarterly groundwater analytical results for the shallow and deep wells are presented in Appendix F and G. Isoconcentration Maps for TPH-g, benzene, and MTBE in the shallow aquifer and MTBE in the secondary aquifer are presented as Plates 5 through 8, respectively.



Sensitive Receptor Survey

As part of the ongoing site evaluation we had prepared a sensitive receptor survey for the subject site dated June 4, 2001. The SRS identified potential receptors to impacted groundwater at the site including domestic wells within approximately 1,000 feet of the site utility trenches within approximately 250 feet of the site and surface water bodies within 750 feet of the site. As new site information became available we prepared updates to the SRS and re-evaluated the potential threat associated with the receptors identified. Subsequent SRS updates were dated March 22, 2004 and May 16, 2005. The results of the most recent SRS update are discussed below.

Well Survey

On April 28 2005, TTC performed a door-to-door survey for domestic wells within approximately 1,000 feet of the subject site. The survey was focused on Helman Lane and Redwood Drive. Previously identified domestic wells were found at 10, 170, 187, 200, 221, and 225 Helman Lane and an industrial well was identified at Northbay Truck Works located at 141 Helman Lane. During our re-survey of domestic wells, we met with the property owner at 141 Helman Lane. The property owner indicated that the industrial well has a total depth of approximately 200 feet below ground surface. Additional well construction details were unavailable. No new domestic or industrial wells were identified.

The well construction details obtained from the Department of Water Resources (DWR) records for domestic wells located at 10, 170, 187, and 200 Helman Lane were presented in our June 4, 2001 *Sensitive Receptor Survey*.

A municipal well for the City of Cotati located at 431 Houser Street is within the ½ mile search radius from the subject site. Details of well construction and annual testing, which includes MtBE, was presented in our March 19, 2004 *Sensitive Receptor Survey Addendum*.

Based on conversations with representatives of City of Cotati Planning Department, it is our understanding that the residence located at 10 Helman Lane is scheduled for demolition. Information regarding specific dates for demolition and potential well abandonment at 10 Helman Lane is unavailable. Based on conversations with representatives from the City of Cotati Public Works Department and the City of Cotati Planning Department, City water service is scheduled for Helman Lane in the “near future”. The locations of the domestic, industrial, and municipal wells identified during our sensitive receptor survey and subsequent updates are approximately located as shown on the attached Site Vicinity Map - Well Locations, Plate 3.



Utility Investigation

In order to identify potential preferential pathways for groundwater migration, TTC re-investigated locations of underground utilities within 250 feet of the site. Our utility re-survey focused onsite utility corridors. On April 28, 2005, TTC met with representatives of the subject site to discuss onsite utility locations and to update the existing utility map. Approximate utility locations are shown on the attached Site Plan / Utility Map, Plate 4. A detailed site utility plan from the property owner which may present previously unidentified utility trenches is pending.

Operational History

On July 5, 2005, TTC staff reviewed files relative to the onsite UST and piping upgrades, as well as inspection reports at the Sonoma County Department of Emergency Services (SCDES). In the files at the SCDES we found inspection reports from 1991 and 1992 that indicated that a release from the product piping had occurred. The leaks were subsequently repaired during a product line upgrade performed by Petro Tech. Since the reported releases in 1991 and 1992 no reported leaks or spills were on file at the SCDES.

From the file review we determined that the three UST's at the site are all single wall steel tanks that have been lined with fiberglass at various times. The tank lining occurred on each tank at different times. The first tank was lined in 1986, the second and third tank in 1992. As part of the current regulations, it is our understanding that single wall steel tanks that have been lined with fiberglass are required to be inspected every 5 years and cannot be re-lined.

Discussions

It appears that the impact to soil groundwater at the subject site is a result of leaking underground piping in association with the UST's, as demonstrated by samples collected by Petro Tech in 1992, and various inspection reports that have indicated leaking piping. Currently, the site appears to be managed well with no reported spills, leaks or releases since the product line upgrade in 1992. No indication of a substantial release from the UST's or associated product piping has been documented at the site.



While significant concentrations of petroleum hydrocarbons exist in the groundwater at the site, the lateral extent of groundwater impact appears to be defined to the north by MW-5, to the east by MW-3, to the south by MW-9, and to the west by MW-6. The vertical extent of groundwater impact also appears relatively well defined. The contaminant plume in the secondary aquifer appears defined by CPT-3 to the east, and CPT-2 to the south with the leading edge of the impact defined by the existing monitoring wells MW-1D through MW-3D to the north and west.

It appears that adequate contaminant plume definition has been performed at the subject property.

In an effort to further understand the subsurface soil conditions throughout the site we have prepared three Geologic Cross Sections, Plates A, B and C. The Geologic Cross Sections represent the subsurface conditions along a profile line, as specified on Plate 2, and are interpreted from previously prepared boring logs. From Cross Section A-A' and B-B' we see that multiple discontinuous lenses of sandy soils are found in the shallow soils throughout the site. Groundwater tends to be found within the discontinuous sand layers generally located between 8 and 15 feet BG.

From Cross Section C-C' we see that a significant aquitard is present between the first and second encountered groundwater zones. The aquitard consists of clay, silty clay and clayey silt. We also note that the sand and gravel in the secondary aquifer is more laterally extensive than the shallow aquifer however, the sand and gravel lense does appear to thin as you move away from the existing flood control channel.

Time vs. Concentration Maps for MW-1, MW-4, and MW-7 have been prepared and are presented in Appendix H. From the Time vs. Concentration Graphs, we see that the concentrations detected in wells MW-1 and MW-7 appear to be gradually increasing since consistent quarterly monitoring began in 2001. This may be an indication that impacted soils from previous releases are continuing to leach into groundwater.

The results of the SRS indicated that potential sensitive groundwater receptors and preferential pathways do exist near the site. We have identified the receptors and have determined that they do not appear to be at substantial risk. The identified preferential pathways, specifically the onsite product line trenches, appear to generally occur above the groundwater levels at the site but are potentially aiding in the distribution of contaminants at the site.



Recommendations

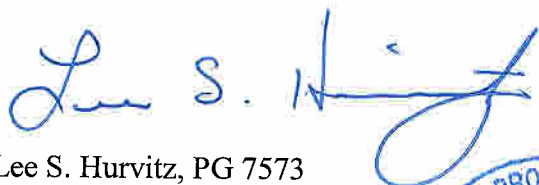
It is our understanding that the onsite UST's will be required to be re-inspected no later than 2009, due to the regulatory standards outlined for steel UST's that have been lined with fiberglass. Therefore, it appears prudent, absent a significant increase or migration of contaminants, that a "corrective action plan" (CAP) be prepared to evaluate possible "in-situ" remediation techniques until source removal becomes a better economic option.

We propose that an CAP be prepared to mitigate the effect of petroleum hydrocarbon impacted soils leaching into groundwater protected by the State of California. The proposed CAP will evaluate several different approaches to determine the most appropriate and cost effective in situ remediation methods. The evaluations will include, soil vapor extraction, groundwater pump and treat, ozone injection, and dual phase extraction. We also recommend that continued evaluation of the receptors identified, with regards to the impact onsite, should be performed.

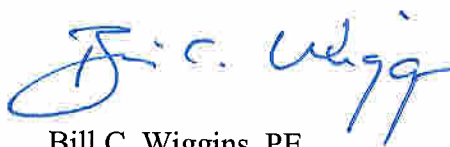
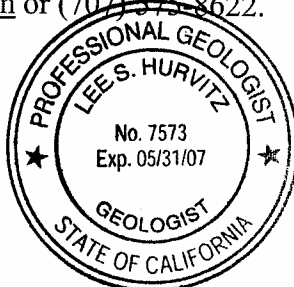


We appreciate the opportunity to be of service to you and we trust that this is the information you require at this time. If you have any questions or need additional information, please do not hesitate to contact us at www.transtechconsultants.com or (707) 575-8622.

Sincerely
TRANS TECH CONSULTANTS



Lee S. Hurvitz, PG 7573
Senior Geologist



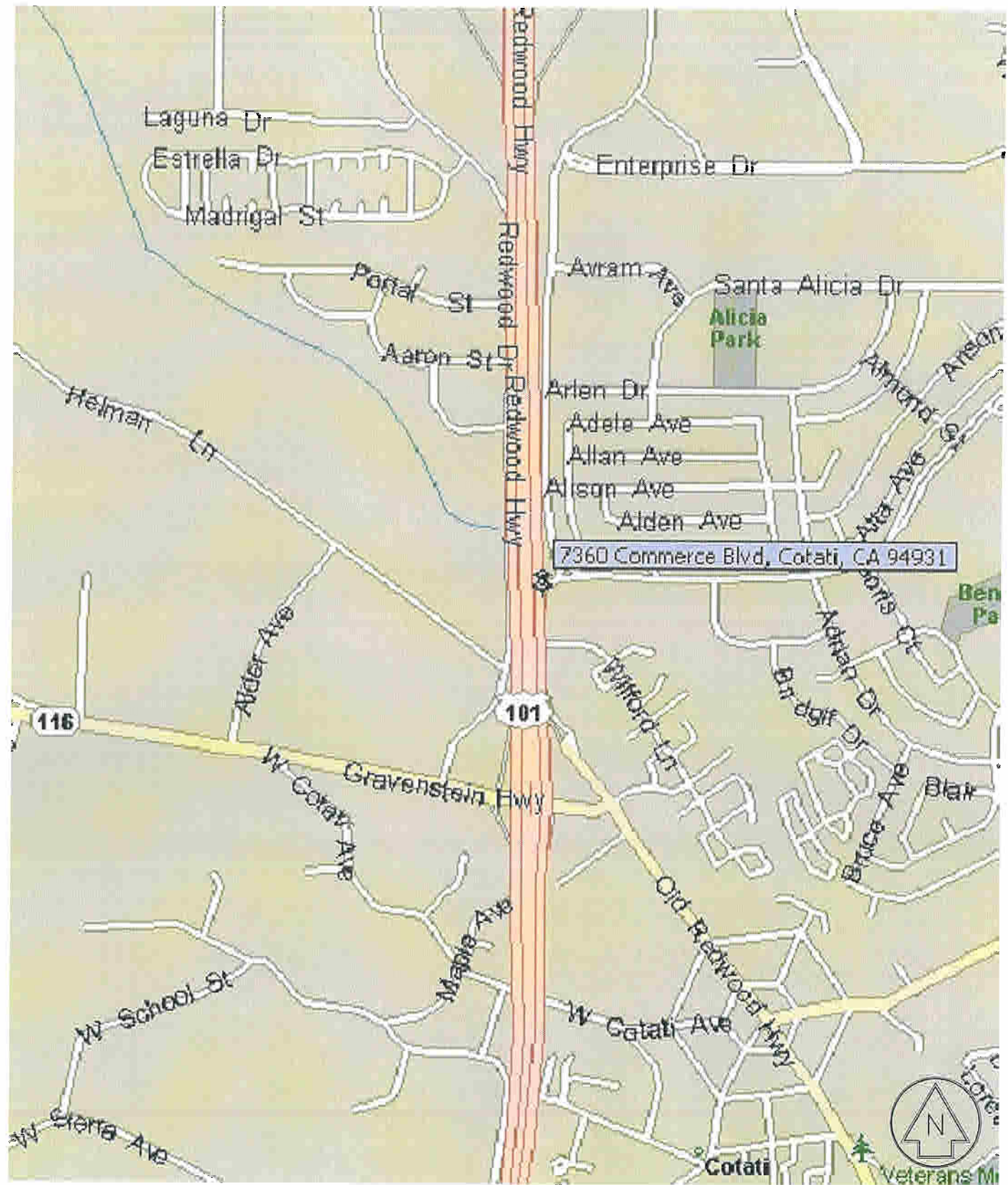
Bill C. Wiggins, PE
Registered Civil Engineer



Enclosures:

Plate 1,	Site Location Map
Plate 2,	Site Plan with Cross Sections
Plate 3,	Site Vicinity Map - Well Locations
Plate 4,	Site Plan / Utility Map
Plate 5,	Iso-concentration Map Shallow Wells - TPH-g
Plate 6,	Iso-concentration Map Shallow Wells- Benzene
Plate 7,	Iso-concentration Map Shallow Wells- MTBE
Plate 8,	Iso-concentration Map Deep Wells - MTBE
Plate A,	Cross Section A-A'
Plate B,	Cross Section B-B'
Plate C,	Cross Section C-C'
Appendix A,	Historical Flow Direction and Gradient Data Shallow Wells
Appendix B,	Historical Flow Direction and Gradient Data Deep Wells
Appendix C,	Previous Site Investigation Soil Sample Analytical Results
Appendix D,	Previous site Investigation Groundwater Sample Analytical Results
Appendix E,	September 2003 and February 2004 CPT Investigation Results
Appendix F,	Historical Groundwater Sample Analytical Results Shallow Wells
Appendix G,	Historical Groundwater Sample Analytical results - Deep Wells
Appendix H,	Time vs. Concentration Graphs, MW-1, MW-4, MW-7
Distribution List	





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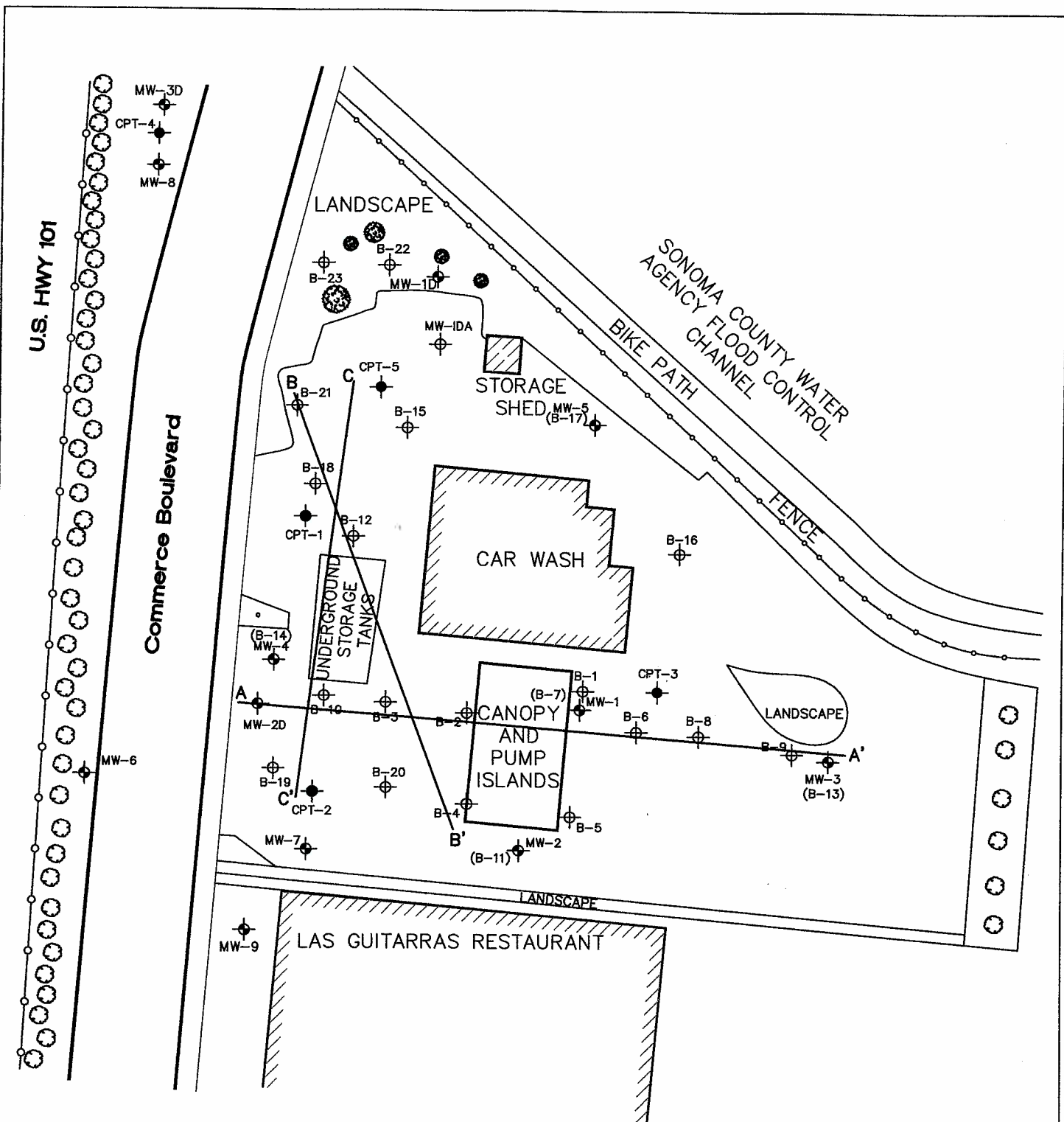
SITE LOCATION MAP

ROYAL COACH CARWASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

1

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1222.01 SLM	BCW	1222.01	A-340		12/15/03



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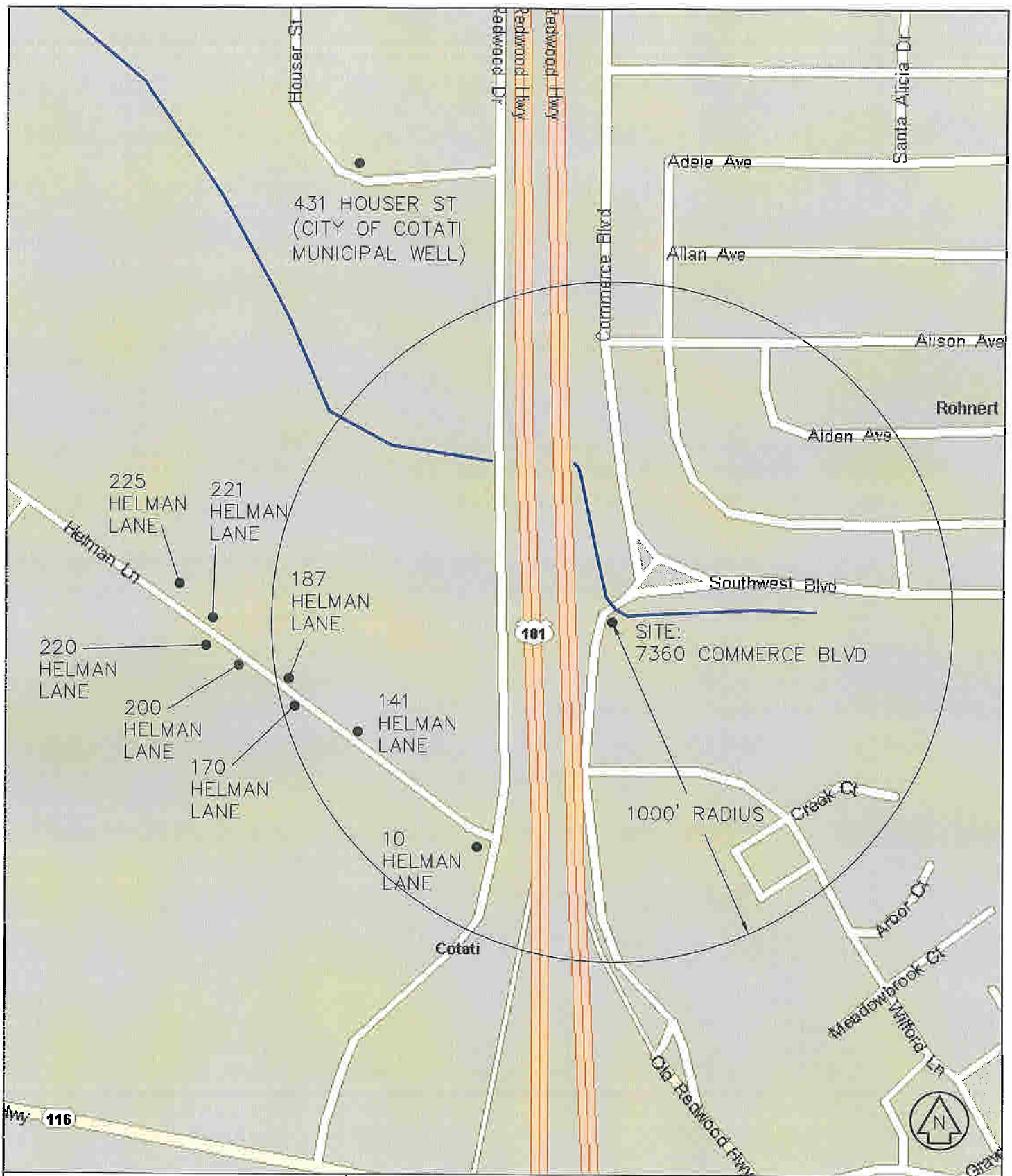
SITE PLAN WITH CROSS SECTIONS

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

2

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
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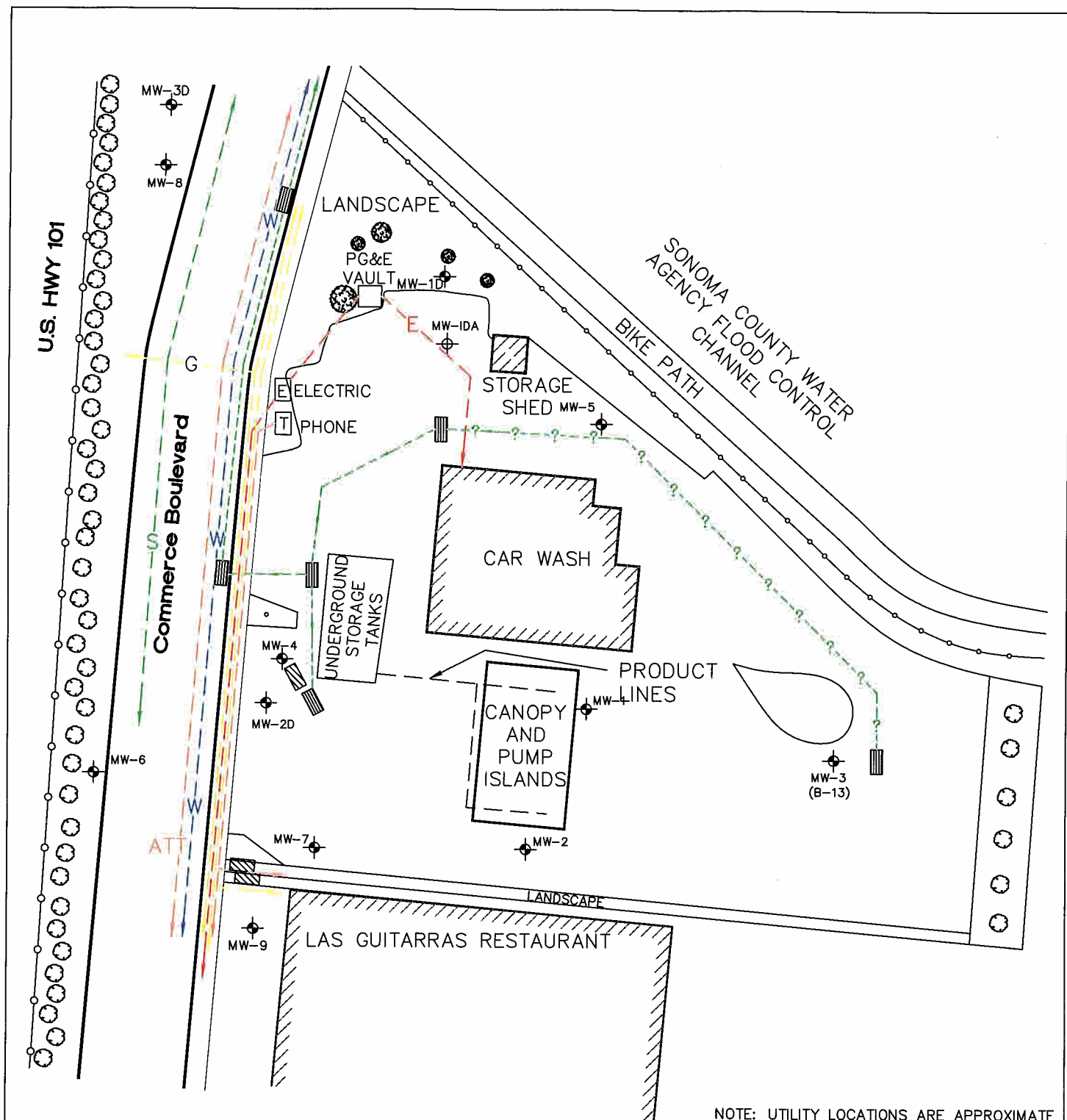
SITE VICINITY MAP — WELL LOCATIONS

ROYAL COACH CAR WASH
7360 COMMERCE BLVD
COTATI, CA

PLATE:

3

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
JLP	1222.01 VM(2)	BRH	1222.01	A-758		5/13/05



NOTE: UTILITY LOCATIONS ARE APPROXIMATE

- MONITORING WELL LOCATION
- STORM DRAIN
- WATER VAULTS
- FIBER OPTIC LINE
- WATER LINE
- SEWER LINE
- ELECTRIC
- COMMUNICATION
- GAS LINE

0 20' 40'
Bar Scale ±



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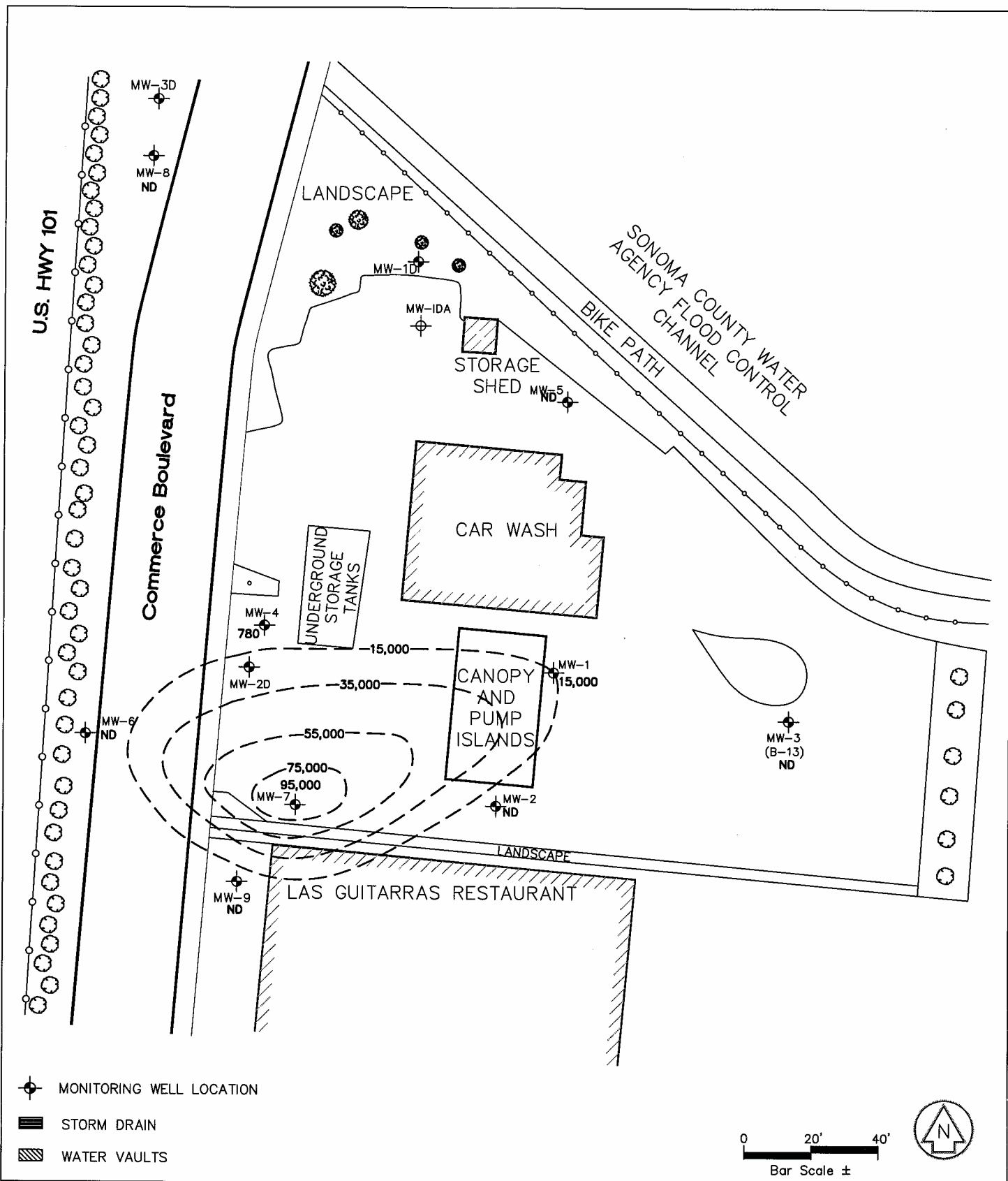
SITE PLAN/ UTILITY MAP

ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

4

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
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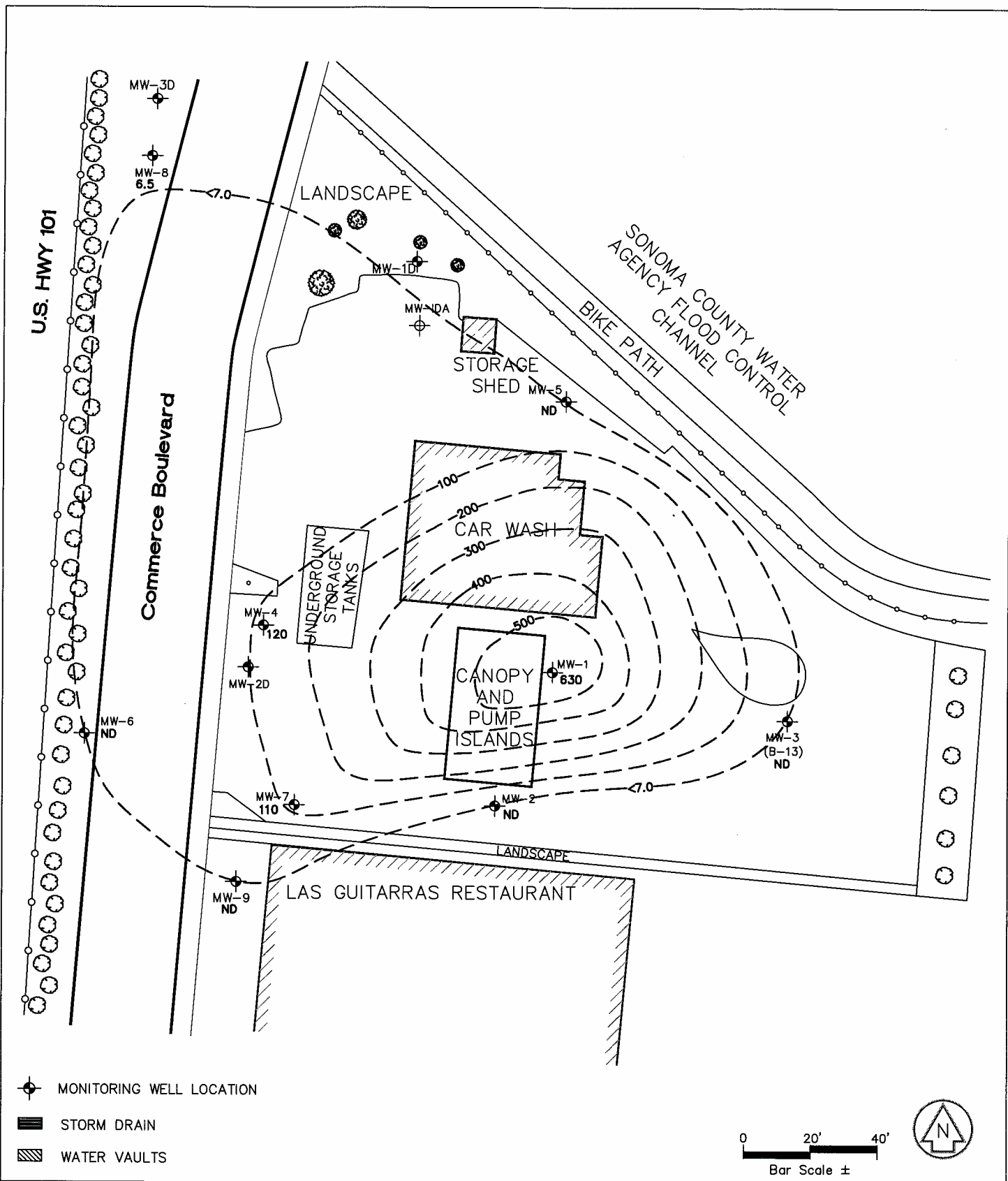
ISOCONCENTRATION MAP TPH AS GASOLINE

A-ZONE AQUIFER
ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

5

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1222.01 SP	LSH	1222.01	A-783		6/15/05



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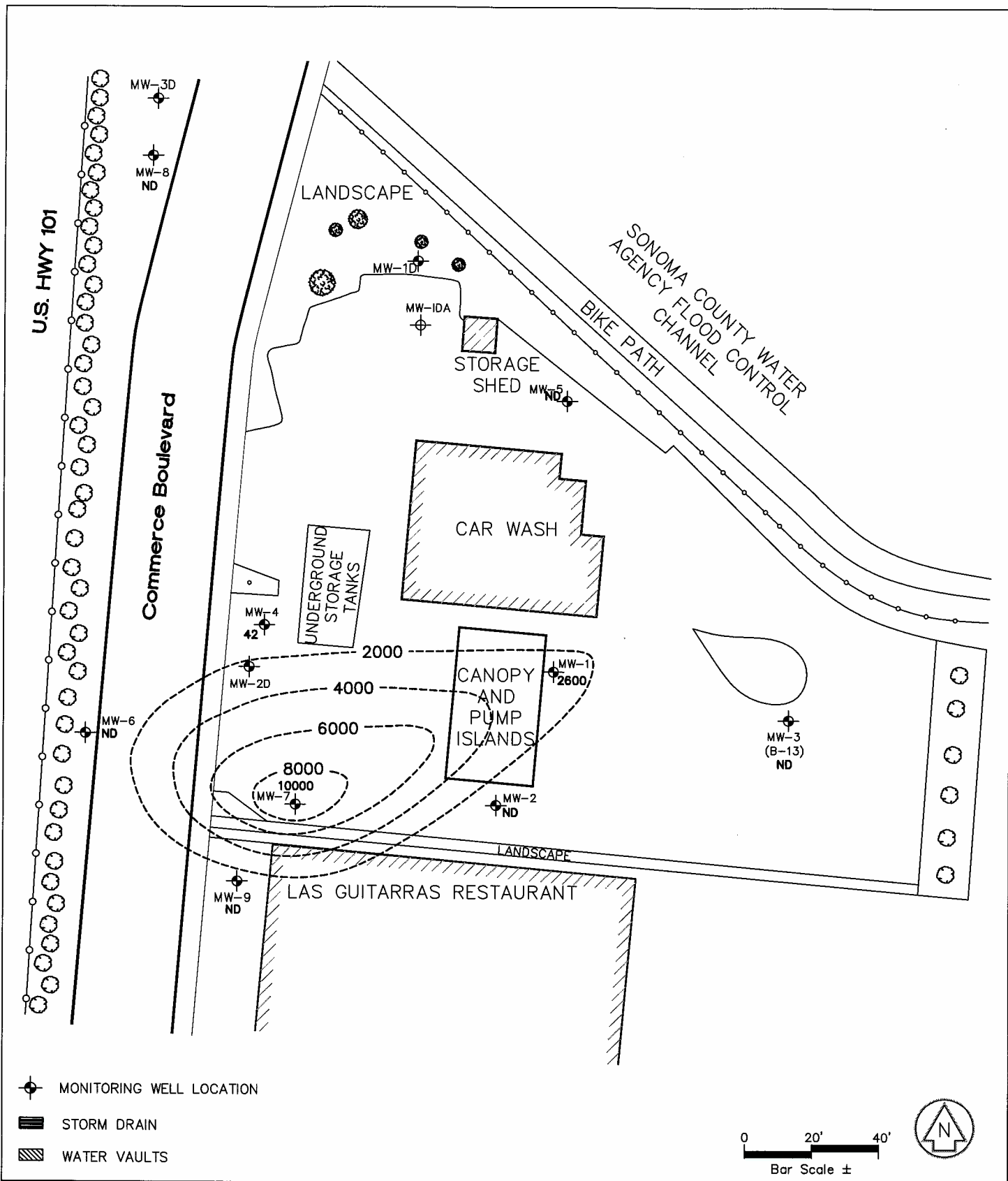
ISOCONCENTRATION MAP MTBE

A-ZONE AQUIFER
ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

7

DRAWN BY: PSC	DWG NAME: 1222.01 SP	APPR. BY: LSH	JOB NUMBER: 1222.01	W.O. NUMBER: A-783	REVISIONS:	DATE: 6/15/05
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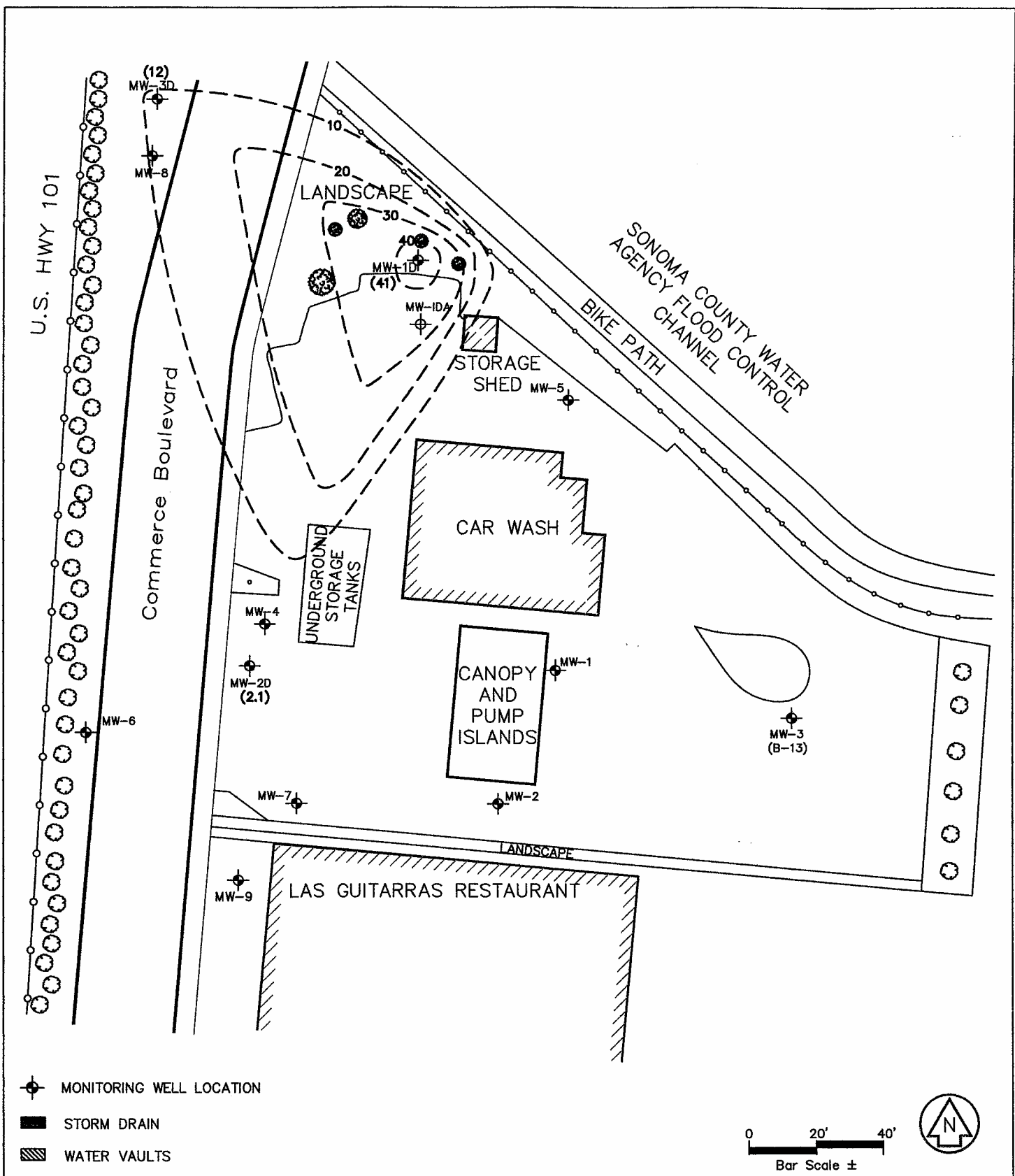
ISOCONCENTRATION MAP BENZENE

A-ZONE AQUIFER
ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

PLATE:

6

DRAWN BY: PSC	DWG NAME: 1222.01 SP	APPR. BY: LSH	JOB NUMBER: 1222.01	W.O. NUMBER: A-783	REVISIONS:	DATE: 6/15/05
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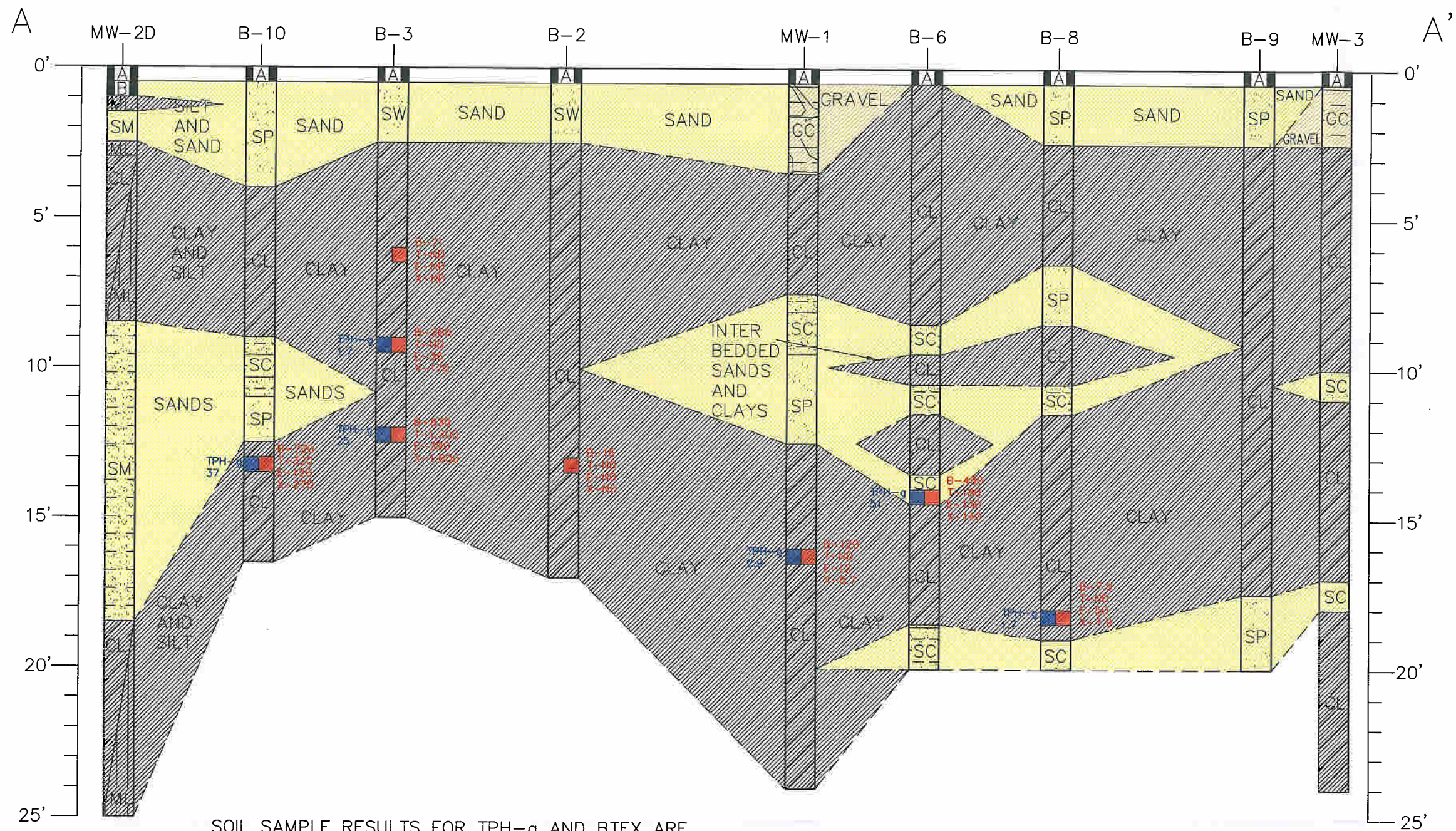
ISOCONCENTRATION MAP - MTBE

B-ZONE AQUIFER
ROYAL COACH CAR WASH
7360 COMMERCE BLVD.
COTATI, CALIFORNIA

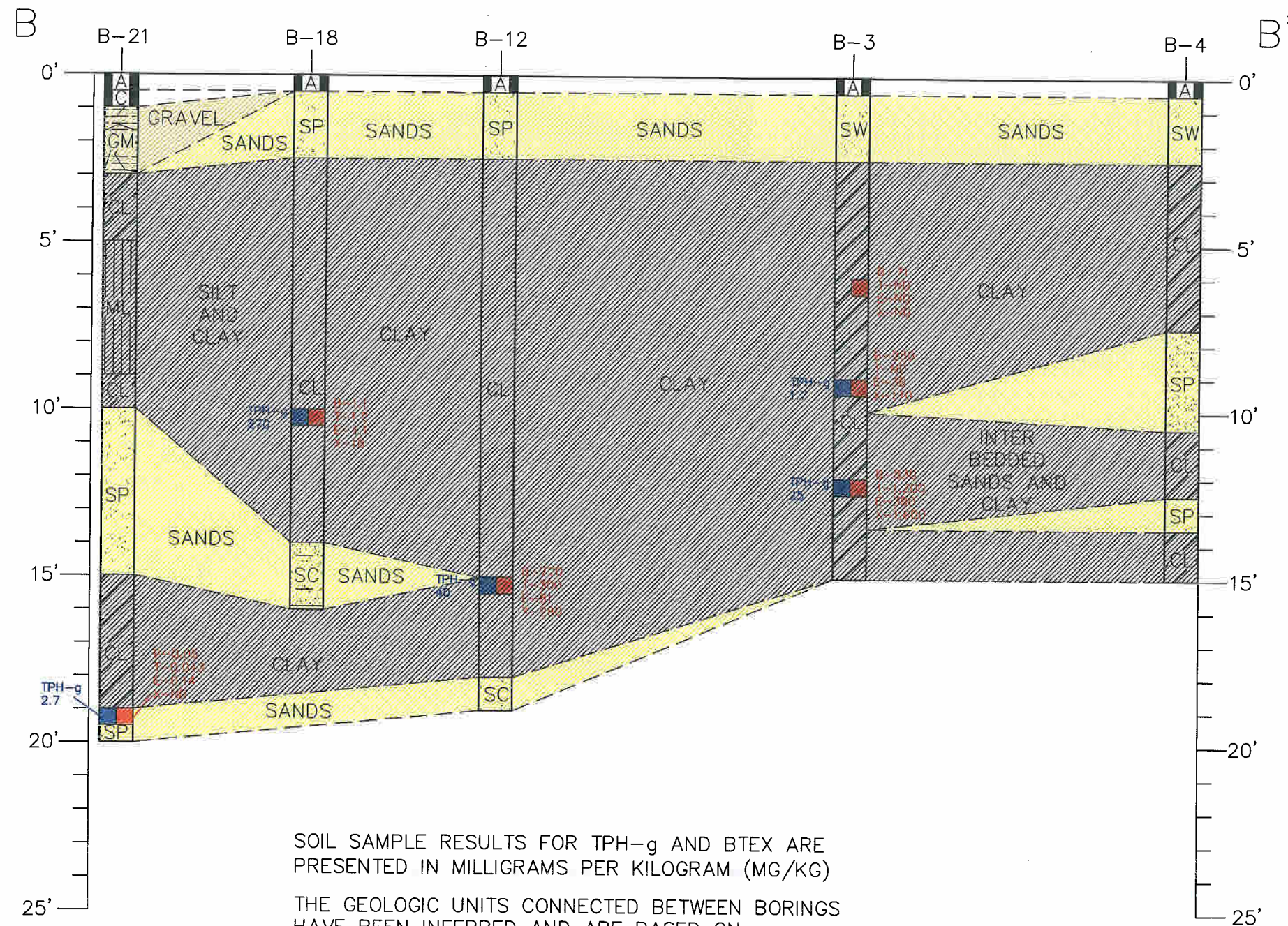
PLATE:

8

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1222.01 SP	LSH	1222.01	A-783		6/16/05



CROSS SECTION A-A'		DATE: 5/18/05		DRAWN: JLP	
ROAYL COACH CAR WASH		JOB #: 1222.01		DATE: 5/18/05	
7360 COMMERCE BLVD.		NO.		DESC	
COTATI, CA		DATE		DATE	
PLATE A		NO.		DATE	
TRANS TECH CONSULTANTS		NO.		DATE	
930 SHILOH RD., BLDG 44, SUITE J		NO.		DATE	
WINDSOR, CA 95492		NO.		DATE	
PHONE: 707-575-8622 FAX: 707-837-7334		NO.		DATE	



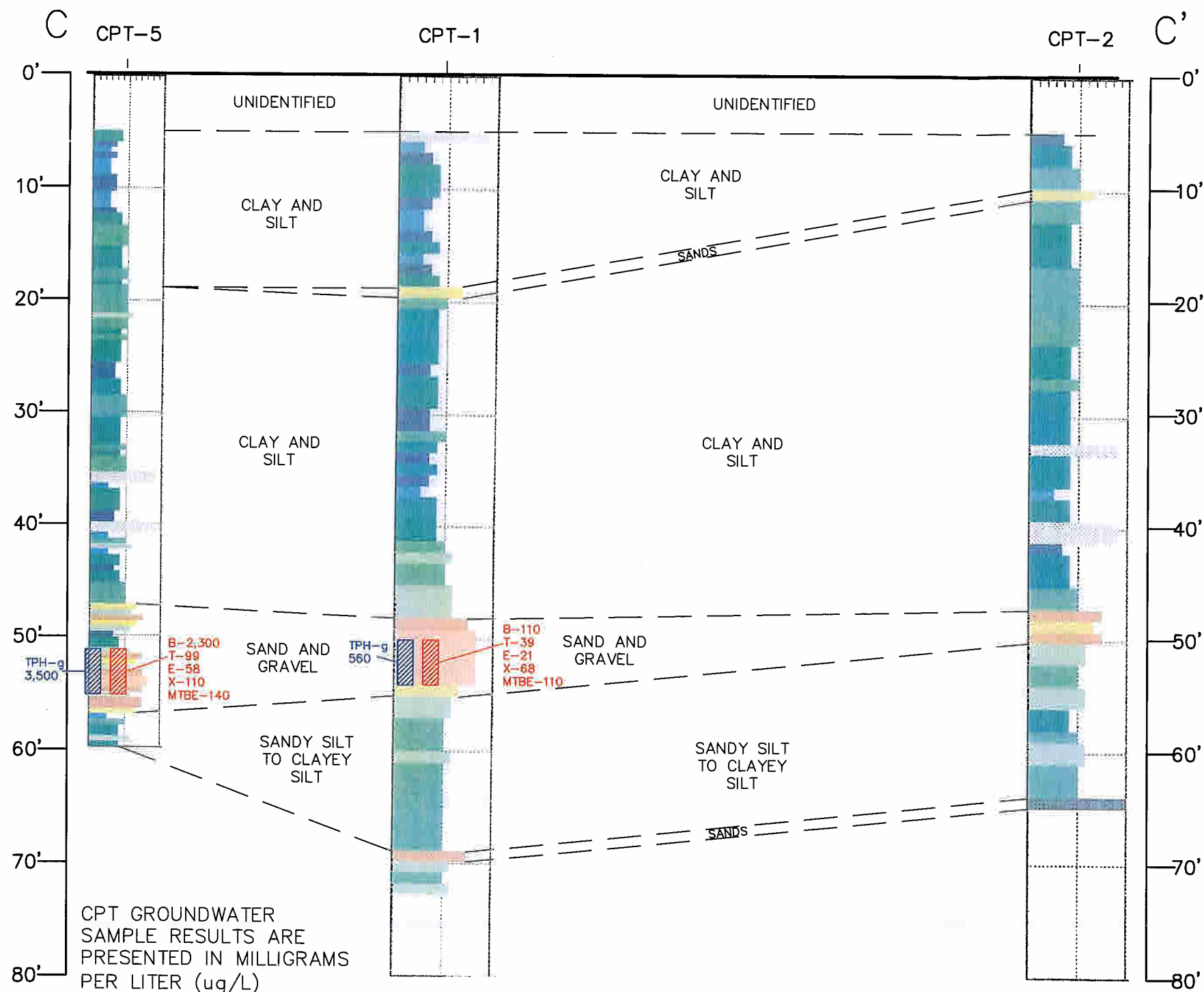
SOIL SAMPLE RESULTS FOR TPH-g AND BTEX ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (MG/KG)

THE GEOLOGIC UNITS CONNECTED BETWEEN BORINGS HAVE BEEN INFERRED AND ARE BASED ON INTERPOLATION BETWEEN THE BORING LOCATIONS. FOR CLARITY, DASHED LINES ARE USED TO REPRESENT CONTACTS BETWEEN UNITS, BUT THESE ARE NOT MEANT TO IMPLY CERTAINTY.

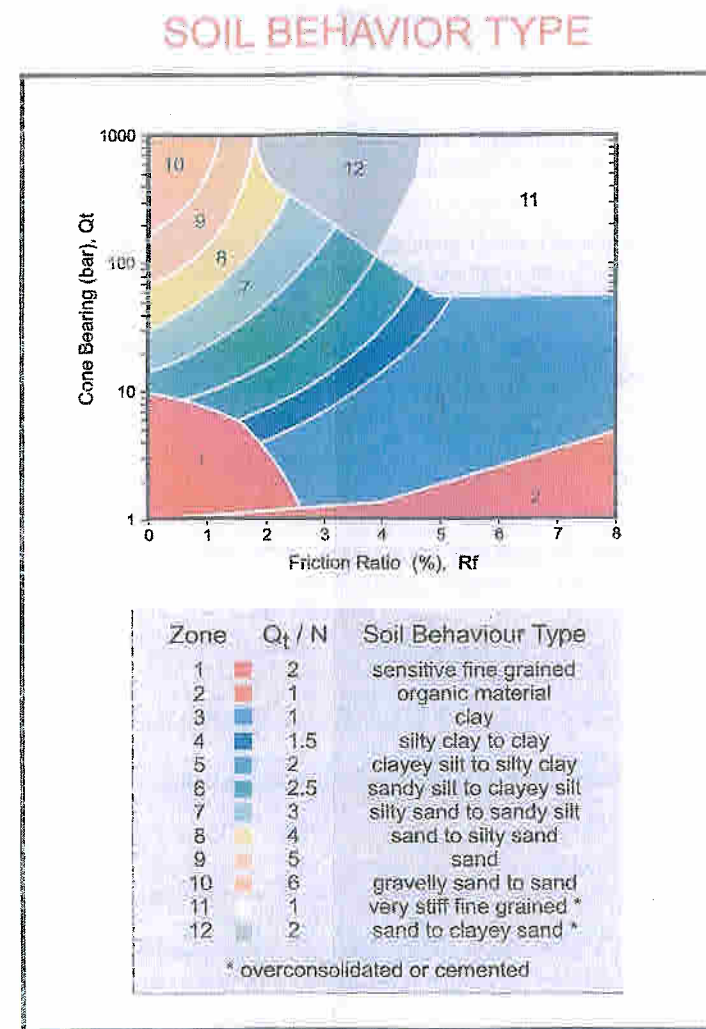
SOIL SAMPLE LOCATION

HORIZONTAL SCALE: 1" = 16'
VERTICAL: NOT TO SCALE

CROSS SECTION A-A'		DATE: 5/23/05	DRAWN: JLP
ROAYL COACH CAR WASH 7360 COMMERCE BLVD. COTATI, CA		JOB #: 1222.01	
TRANS TECH CONSULTANTS		NO.	DESC
930 SHILOH RD., BLDG 44, SUITE J WINDSOR, CA 95492 PHONE: 707-575-8622 FAX: 707-837-7334		DATE	
PLATE B			



THE GEOLOGIC UNITS CONNECTED BETWEEN BORINGS HAVE BEEN INFERRED AND ARE BASED ON INTERPOLATION BETWEEN THE BORING LOCATIONS. FOR CLARITY, DASHED LINES ARE USED TO REPRESENT CONTACTS BETWEEN UNITS, BUT THESE ARE NOT MEANT TO IMPLY CERTAINTY.



INDICATES GROUNDWATER SAMPLE LOCATIONS

HORIZONTAL SCALE: 1" = 16'
VERTICAL: NOT TO SCALE

TRANS TECH CONSULTANTS 930 SHILOH RD., BLDG 44, SUITE J WINDSOR, CA 95492 PHONE: 707-575-8622 FAX: 707-837-7334	CROSS SECTION C-C' ROAYL COACH CAR WASH 7360 COMMERCE BLVD. COTATI, CA		DATE: 5/24/05	DRAWN: JLP
	JOB #: 1222.01	DATE	NO.	DESC

APPENDIX A

Appendix A - Historical Flow Direction and Gradient Data - Shallow Wells

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
03/13/01	MW-1	97.31	10.44	86.87	Variable
	MW-2	97.19	9.55	87.64	
	MW-3	96.95	9.09	87.86	
	MW-4	96.59	9.00	87.59	
	MW-5	96.97	9.78	87.19	
	MW-6	97.17	8.45	88.72	
06/26/01	MW-1	97.31	16.90	80.41	Variable
	MW-2	97.19	16.40	80.79	
	MW-3	96.95	16.40	80.55	
	MW-4	96.59	15.86	80.73	
	MW-5	96.97	16.11	80.86	
	MW-6	97.17	15.11	82.06	
07/31/01	MW-1	97.31	19.72	77.59	Variable
	MW-2	97.19	18.99	78.20	
	MW-3	96.95	18.99	77.96	
	MW-4	96.59	17.40	79.19	
	MW-5	96.97	19.50	77.47	
	MW-6	97.17	17.70	79.47	
08/23/01	MW-1	97.31	20.88	76.43	S10°W i = 0.02
	MW-2	97.19	20.11	77.08	
	MW-3	96.95	18.51	78.44	
	MW-4	96.59	20.55	76.04	
	MW-5	96.97	17.32	79.65	
	MW-6	97.17	19.26	77.91	



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
09/24/01	MW-1	97.31	21.80	75.51	Variable
	MW-2	97.19	21.03	76.16	
	MW-3	96.95	20.06	76.89	
	MW-4	96.59	17.57	79.02	
	MW-5	96.97	21.47	75.50	
	MW-6	97.17	20.16	77.01	
10/24/01	MW-1	97.31	NM	NM	Variable
	MW-2	97.19	21.46	75.73	
	MW-3	96.95	20.82	76.13	
	MW-4	96.59	18.16	78.43	
	MW-5	96.97	NM	NM	
	MW-6	97.17	20.85	76.32	
11/19/01	MW-1*	99.52	NM	<77.67	N65°E i = 0.03
	MW-2	99.39	18.51	80.88	
	MW-3	99.18	17.99	81.19	
	MW-4	98.79	17.28	81.51	
	MW-5	99.16	20.08	79.08	
	MW-6	99.42	18.96	80.46	
Note: Additional groundwater flow direction data is available prior to June 26, 2001. * Insufficient water in well to measure water level.					



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
12/21/01	MW-1	99.52	13.79	85.73**	Due North i = 0.03
	MW-2	99.39	10.61	88.78	
	MW-3	99.18	10.08	89.10	
	MW-4	98.79	11.39	88.40	
	MW-5	99.16	12.89	86.27	
	MW-6	99.42	9.10	90.32	
01/23/02	MW-1	99.52	9.52	90.00	Due North i = 0.02
	MW-2	99.39	9.31	90.08	
	MW-3	99.18	8.62	90.56	
	MW-4	98.79	9.10	89.69	
	MW-5	99.16	9.57	89.59	
	MW-6	99.42	8.36	91.06	
03/27/02	MW-1	99.52	9.67	89.85	Northerly i = 0.02
	MW-2	99.39	8.69	90.70	
	MW-3	99.18	8.35	90.83	
	MW-4	98.79	8.68	90.11	
	MW-5	99.16	9.52	89.64	
	MW-6	99.42	7.80	91.62	
** Water level data was not used to calculate flow direction and gradient.					



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
6/28/02	MW-1	99.52	14.48	85.04	Northerly i = 0.02
	MW-2	99.39	13.64	85.75	
	MW-3	99.18	12.40	86.78	
	MW-4	98.79	13.80	84.99	
	MW-5	99.16	12.75	86.41	
	MW-6	99.42	13.10	86.32	
10/02/02	MW-1	99.52	20.65	78.87	Northerly i = 0.01
	MW-2	99.39	20.41	78.98	
	MW-3	99.18	19.59	79.60	
	MW-4	98.79	17.93	80.86	
	MW-5	99.16	20.23	78.93	
	MW-6	99.42	19.50	79.92	
	MW-7	98.86	18.92	79.94	
2/07/03	MW-1	99.52	10.03	89.49	Northerly i = 0.02
	MW-2	99.39	9.88	89.51	
	MW-3	99.18	9.57	89.61	
	MW-4	98.79	9.46	89.33	
	MW-5	99.16	9.68	89.48	
	MW-6	99.42	8.55	90.87	
	MW-7	98.86	8.49	90.37	



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet > msl)	Depth to Groundwater (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction & Gradient
05/07/03	MW-1	99.52	9.11	90.41	Northerly i = 0.02
	MW-2	99.39	8.17	91.22	
	MW-3	99.18	7.52	91.66	
	MW-4	98.79	7.77	91.02	
	MW-5	99.16	9.12	90.04	
	MW-6	99.42	6.89	92.53	
	MW-7	98.86	7.00	91.86	
08/14/03	MW-1	99.52	16.80	82.72	North Easterly i = 0.03
	MW-2	99.39	16.35	83.03	
	MW-3	99.18	15.96	83.22	
	MW-4	98.79	16.01	82.78	
	MW-5	99.16	16.00	83.16	
	MW-6	99.42	14.85	84.57	
	MW-7	98.86	15.04	83.82	
11/18/03	MW-1	99.52	20.70	78.82	North Westerly i = varies
	MW-2	99.39	20.45	78.94	
	MW-3	99.18	17.38	81.80	
	MW-4	98.79	17.49	81.30	
	MW-5	99.16	19.09	80.07	
	MW-6	99.42	18.60	80.82	
	MW-7	98.86	18.56	80.30	



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient
02/24/04	MW-1	99.52	8.28	91.24	Northerly i = 0.02
	MW-2	99.39	7.24	92.15	
	MW-3	99.18	6.99	92.19	
	MW-4	98.79	6.83	91.96	
	MW-5	99.16	9.11	90.05	
	MW-6	99.42	5.93	93.49	
	MW-7	98.86	6.18	92.68	
	MW-8	99.09	9.35	89.74	
05/26/04	MW-1	99.52	11.10	88.42	Northwesterly i = 0.01
	MW-2	99.39	10.03	89.36	
	MW-3	99.18	9.50	89.68	
	MW-4	98.79	10.55	88.24	
	MW-5	99.16	10.40	88.76	
	MW-6	99.42	10.60	88.82	
	MW-7	98.86	10.22	88.64	
	MW-8	99.09	11.29	87.80	
	MW-9	99.42	10.53	89.39	
08/11/04	MW-1	99.52	13.42	86.10	Northwesterly i = 0.01
	MW-2	99.39	12.05	87.34	
	MW-3	99.18	11.03	88.15	
	MW-4	98.79	12.66	86.13	
	MW-5	99.16	12.57	86.59	
	MW-6	99.42	12.47	86.95	
	MW-7	98.86	11.98	86.88	
	MW-8	99.09	13.86	85.23	
	MW-9	99.42	12.30	87.12	



Appendix A Continued

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient
11/17/04	MW-1	99.52	12.45	87.07	Northwesterly $i = 0.01$
	MW-2	99.39	11.97	87.42	
	MW-3	99.18	10.40	88.78	
	MW-4	98.79	11.90	86.89	
	MW-5	99.16	11.43	87.73	
	MW-6	99.42	11.99	87.43	
	MW-7	98.86	11.49	87.37	
	MW-8	99.09	14.38	84.71	
	MW-9	99.42	11.86	87.56	
02/17/05	MW-1	99.52	7.79	91.73	Northeasterly $i = 0.02$
	MW-2	99.39	7.47	91.92	
	MW-3	99.18	7.25	91.90	
	MW-4	98.79	6.78	92.01	
	MW-5	99.16	9.02	90.14	
	MW-6	99.42	6.60	92.82	
	MW-7	98.86	6.29	92.57	
	MW-8	99.09	8.96	90.13	
	MW-9	99.42	6.50	92.92	
05/25/05	MW-1	99.52	6.48	93.04	Northeasterly $i = 0.02$
	MW-2	99.39	5.90	93.49	
	MW-3	99.18	6.29	92.89	
	MW-4	98.79	5.31	93.48	
	MW-5	99.16	8.60	90.56	
	MW-6	99.42	5.44	93.98	
	MW-7	98.86	5.12	93.74	
	MW-8	99.09	7.98	91.11	
	MW-9	99.42	5.45	93.97	



APPENDIX B

Appendix B - Historical Flow Direction and Gradient Data - Deep Wells

Date	Monitoring Well ID	TOC Elevation (feet - msl)	Depth to Groundwater (feet)	Water Level Elevation (feet - msl)	Groundwater Flow Direction & Gradient (i)
11/19/04	MW-1D	99.11	15.51	83.60	N 75°W i = 0.03
	MW-2D	98.45	15.12	83.33	
	MW-3D	98.89	17.32	81.57	
02/17/05	MW-1D	99.11	10.40	88.71	N 80° W i = 0.02
	MW-2D	98.45	10.12	88.33	
	MW-3D	98.89	11.85	87.04	
05/25/05	MW-1D	99.11	9.14	89.97	N 80° W i = 0.02
	MW-2D	98.45	8.92	89.53	
	MW-3D	98.89	10.45	88.44	



APPENDIX C

Appendix C - Investigation Soil Sample Analytical Results

Soil Sample Analytical Results from May 3, 1993 Investigation

Sample Date	Boring ID	Depth (ft.)	TPH as gasoline	B	T	E	X
			-----mg/Kg-----	-----µg/Kg-----			
05/03/93	B-1	4.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-1	11.0	1.2	38	<2.5	<2.5	<2.5
	B-2	6.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-2	13.0	<1.0	16	<2.5	<2.5	<2.5
	B-3	6.0	<1.0	71	<2.5	<2.5	<2.5
	B-3	9.0	1.7	280	<2.5	36	170
	B-3	12.5	25	830	1,200	390	1,600
	B-4	6.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-4	11.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-5	6.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-5	9.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-5	14.0	<1.0	<2.5	<2.5	<2.5	<2.5

< = Less than the indicated laboratory detection limit.

Soil Sample Analytical Results from February 1994 Investigation

Sample Date	Boring ID	Depth (ft.)	TPH as gasoline	B	T	E	X
			-----mg/Kg-----	-----µg/Kg-----			
02/22/94	B-6	14.5	51	480	180	130	140
	B-7 (MW-1)	3.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-7 (MW-1)	11.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-7 (MW-1)	16.0	2.9	120	<2.5	12	8.7
	B-8	17.5	1.7	7.9	<2.5	50	7.9
	B-9	16.0	<1.0	<2.5	<2.5	<2.5	<2.5
02/23/94	B-10	13.5	37	720	230	120	270
	B-11 (MW-2)	8.5	<1.0	<2.5	<2.5	<2.5	<2.5
	B-11 (MW-2)	13.5	<1.0	<2.5	<2.5	<2.5	<2.5
	B-12	15.5	40	720	300	81	280
	B-13 (MW-3)	15.5	<1.0	<2.5	<2.5	<2.5	<2.5



Appendix C - Continued

Soil Sample Analytical Results from February 1994 Investigation

Sample Date	Boring ID	Depth (ft.)	TPH as gasoline	B	T	E	X
			-----mg/Kg-----	-----µg/Kg-----			
02/24/94	B-14 (MW-4)	6.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-14 (MW-4)	11.0	<1.0	87	29	16	42
	B-15	16.0	<1.0	<2.5	<2.5	<2.5	<2.5
	B-16	15.5	<1.0	<2.5	<2.5	<2.5	<2.5
	B-17 (MW-5)	15.0	<1.0	<2.5	<2.5	<2.5	<2.5
< = Less than the indicated laboratory detection limit.							

Soil Sample Analytical Results from April/November 2000 Investigation

Sample Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/Kg-----					
04/12/00	B-18 - 10'	270	1.1	1.2	4.1	18	NA
	B-19 - 9.5'	<1.0	<0.005	<0.005	<0.005	<0.015	7.4
	B-20 - 10'	<1.0	0.007	<0.005	<0.005	<0.015	12
11/22/00	MW-6 - 6'	<1.0	<0.005	<0.005	<0.005	<0.015	<5.0
	MW-6 - 11.5'	<1.0	<0.005	<0.005	<0.005	<0.015	<5.0
NA = Not analyzed.							

Soil Sample Analytical Results from August/October 2002 Investigation

Sample Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/Kg-----					
08/20/02	MW-7-10'	5.0	0.20	0.046	0.21	0.30	<0.050
	MW-7-20'	7.1	1.2	0.058	0.54	0.12	<0.050
< = Less than the indicated laboratory detection limit.							



Appendix C - Continued

Soil Sample Analytical Results from October 2003 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/Kg-----					
10/03/03	B-21-15.5'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
	B-21-19'	2.7	0.05	0.013	0.14	<0.015	0.15
	MW-8-11'	<1.0	0.006	<0.005	<0.005	<0.015	<0.025
	MW-8-20.5'	<500	<0.005	<0.005	<0.005	<0.015	<0.025
< = Less than the indicated laboratory test method detection limit.							

Soil Sample Analytical Results from March 2004 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/Kg-----					
03/16/04	B-22-9.5'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
	B-22-14.5'	<1.0	0.005	<0.005	<0.005	<0.015	<0.025
	B-23-9.5'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
	B-23-11'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
	MW-9-11'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
< = Less than the indicated laboratory test method detection limit.							

Soil Sample Analytical Results from November 2004 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/Kg-----					
11/08/04	MW-1DA-19'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
	MW-2D-19'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
11/10/04	MW-2D-40'	2.4	1.0	0.030	0.17	0.047	<0.025
11/11/04	MW-1D-49'	<1.0	<0.005	0.014	<0.005	0.016	<0.025
11/12/04	MW-3D-19'	<1.0	<0.005	0.013	<0.005	0.015	<0.025
11/15/04	MW-3D-44'	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
< = Less than the indicated laboratory test method detection limit.							



APPENDIX D

Appendix D - Investigation Groundwater Sample Analytical Results

Groundwater Sample Analytical Results from May 3, 1993 Investigation

Sample Date	Sample ID	TPH as gasoline	B	T	E	X
		-----mg/L-----	-----µg/L-----			
05/03/93	B-1	20	1,300	<5.0	390	170
	B-2	2.8	150	<5.0	41	3.1

< = Less than the indicated laboratory detection limit

Groundwater Sample Analytical Results from February 1994 Investigation

Sample Date	Sample ID	TPH as gasoline	B	T	E	X
		-----mg/L-----	-----µg/L-----			
03/03/94	MW-1	23	4,200	2,200	1,400	8,500
	MW-2	0.38*	6.7	<0.5	1.4	2.1
	MW-3	<0.05	<0.5	<0.5	<0.5	<0.5
	MW-4	27	1,400	1,500	920	5,000
	MW-5	<0.05	<0.5	<0.5	<0.5	<0.5

< = Less than indicated laboratory detection limit.
 * = The positive result has an atypical pattern for gasoline analysis.

Groundwater Sample Analytical Results from April/November 2000 Investigation

Sample Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
		-----mg/L-----	-----µg/L-----				
04/12/00	B-18	62,000	13,000	180	2,500	4,900	1,100
	B-19	830	16	1.1	<0.5	<1.5	100
	B-20	10,000	2,200	<50*	210	<150*	290
11/22/00	MW-6	<50	<0.5	<0.5	<0.5	<1.5	<2.0

< = Less than the indicated laboratory detection limit.
 * = High laboratory detection limit due to matrix interference.



Appendix D - Continued

Groundwater Sample Analytical Results from August/October 2002 Investigation

Sample ID	Sample Date	TPH as gasoline	B	T	E	X	MTBE
-----µg/L-----							
10/02/02	MW-1	13,000	2,600	<25	680	26	280*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.6
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	3,100	75	3.1	6.9	16	260*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	37,000	9,700	160	3,500	1,000	140
< = Less than the indicated laboratory detection limit. * = Additional fuel oxygenates were detected above the laboratory detection limit, see TTC's October 30, 2002 Summary Report/Quarterly Monitoring Report.							

Groundwater Sample Analytical Results from October 2003 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
-----µg/L-----							
10/03/03	B-21	5,600	210	25	1,200	34	900*
10/16/03	MW-8	<50	<1.0	<1.0	<1.0	<1.0	6.9
< = Less than the indicated laboratory test method detection limit. * = tert-amyl methyl ether (TAME) was detected at 60 µg/L.							

Groundwater Sample Analytical results from March 2004 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
-----µg/L-----							
03/16/04	B-22	<50	<0.5	<0.5	<0.5	<1.5	<2.5
	B-23	<50	<0.5	0.58	0.62	3.5	<2.5
03/26/04	MW-9	<50	<0.5	<0.5	<0.5	<1.5	<2.5
< = Less than the indicated laboratory test method detection limit.							



Appendix D - Continued

Groundwater Sample Analytical Results from November 2004 Investigation

Date	Sample ID	TPH as gasoline	B	T	E	X
		µg/L				
11/19/04	MW-1D	57	<1.0	<1.0	<1.0	<1.0
	MW-2D	1,600	53	3.4	87	16.9
	MW-3D	<50	<1.0	<1.0	<1.0	<1.0
< = Less than the indicated laboratory test method detection limit.						

Groundwater Sample Analytical Results from November 2004 Investigation - Continued

Date	Sample ID	MTBE	TBA	DIPE	ETBE	TAME
		µg/L				
11/19/04	MW-1D	18	<1.0	<1.0	<1.0	1.1
	MW-2D	110	43	<1.0	<1.0	6.6
	MW-3D	84	<1.0	<1.0	<1.0	5.9
< = Less than the indicated laboratory test method detection limit.						



APPENDIX E

Appendix E - September 2003 and February 2004 CPT Investigation Results

Groundwater Sample Results From CPT Borings

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
-----µg/L-----							
09/16/03	CPT-1	560	110	39	21	68	110*
	CPT-2	<50	<1.0	<1.0	<1.0	<1.0	<1.0
< = Less than the indicated laboratory test method detection limit. * = Tert-amyl methyl ether (TAME) was detected at 5.5 µg/L.							

Groundwater Sample Results From CPT Borings

Date	Sample ID	TPH as gasoline	B	T	E	X	MTBE
-----µg/L-----							
02/25/04	CPT-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	CPT-4	80*	<1.0	<1.0	<1.0	<1.0	73**
	CPT-5	3,500	2,300	99	58	110	140
< = Less than the indicated laboratory test method detection limit. * = The TPH as gasoline result consists primarily of MTBE ** = tert-amyl methyl ether (TAME) was detected at 4.2 µg/L							



APPENDIX F

Appendix F - Historical Groundwater Sample Analytical Results - Shallow Wells

Sample Date	Sample ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
03/13/01	MW-1	2,800	370	0.81	83	<1.5	130*
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.1
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-4	5,900	53	<0.5	310	100	1,700*
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-6	<50	<0.5	<0.5	<0.5	<1.5	<1.0
06/26/01	MW-1	3,700	660	1.4	95	6.2	140*
	MW-2	<50	<0.3	<0.3	<0.5	<0.5	3.3*
	MW-3	<50	<0.3	<0.3	<0.5	<0.5	0.76
	MW-4	2,400	25	2.3	86	18	540*
	MW-5	<50	<0.3	<0.3	<0.5	<0.5	<0.5
	MW-6	<50	<0.3	<0.3	<0.5	<0.5	<0.5
09/24/01	MW-1**	NS	NS	NS	NS	NS	NS
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.2
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-4	2,700	59	15	92	45	160*
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<20***
	MW-6**	NS	NS	NS	NS	NS	NS
<p>Note = Additional groundwater analytical data is available prior to June 26, 2001.</p> <p>< = Indicates the laboratory test method detection limit.</p> <p>* = Additional oxygenated fuel additives detected.</p> <p>** = Insufficient water in well to collect a groundwater sample.</p> <p>*** = Note elevated laboratory detection limit.</p>							



Appendix F Continued

Sample Date	Sample ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
03/13/01	MW-1	2,800	370	0.81	83	<1.5	130*
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.1
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-4	5,900	53	<0.5	310	100	1,700*
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-6	<50	<0.5	<0.5	<0.5	<1.5	<1.0
06/26/01	MW-1	3,700	660	1.4	95	6.2	140*
	MW-2	<50	<0.3	<0.3	<0.5	<0.5	3.3*
	MW-3	<50	<0.3	<0.3	<0.5	<0.5	0.76
	MW-4	2,400	25	2.3	86	18	540*
	MW-5	<50	<0.3	<0.3	<0.5	<0.5	<0.5
	MW-6	<50	<0.3	<0.3	<0.5	<0.5	<0.5
09/24/01	MW-1**	NS	NS	NS	NS	NS	NS
	MW-2	<50	<0.5	<0.5	<0.5	<1.5	1.2
	MW-3	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	MW-4	2,700	59	15	92	45	160*
	MW-5	<50	<0.5	<0.5	<0.5	<1.5	<20***
	MW-6**	NS	NS	NS	NS	NS	NS
<p>Note = Additional groundwater analytical data is available prior to June 26, 2001.</p> <p>< = Indicates the laboratory test method detection limit.</p> <p>* = Additional oxygenated fuel additives detected.</p> <p>** = Insufficient water in well to collect a groundwater sample.</p> <p>*** = Note elevated laboratory detection limit.</p>							



Appendix F Continued

Sample Date	Sample ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
10/02/02	MW-1	13,000	2,600	<25	680	26	280*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.6
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	3,100	75	3.1	6.9	16	260*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	37,000	9,700	160	3,500	1,000	140
02/07/03	MW-1	11,000	2,600	30	790	95	280*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	1,500	6.0	<2.0	<2.0	2.2	21*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	59,000	11,000	9,500	4,400	11,700	110
05/07/03	MW-1	9,400	1,700	<20	600	39	240*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.2
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	930	81	2.8	3.1	15	37*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	65,000	11,000	8,800	4,900	11,900	140



Appendix F Continued

Sample Date	Sample ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
08/14/03	MW-1	12,000	3,100	<20	1,100	30	310*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	1,500	190	2.2	20	59	680*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	51,000	8,600	2,400	3,900	4,600	<100
11/18/03	MW-1	9,500	3,300	73	960	84	430*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	2,500	83	<10	<10	19	170*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	22,000	8,100	240	3,100	770	<100
* = See laboratory report for additional fuel oxygenates detected. < = Indicates the laboratory test method detection limit.							



Appendix F Continued

Date	Well ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
02/24/04	MW-1	7,300	2,300	<50	680	59	340*
	MW-2	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS
	MW-4	1,100	11	<1.0	<1.0	1.3	33*
	MW-5	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS
	MW-7	46,000	8,600	6,800	4,100	10,100	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	35
05/26/04	MW-1	4,300	550	<5.0	120	6.5	190*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	1.1
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	1,100	75	<1.0	1.7	8.4	28*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	28,000	9,300	5,500	4,500	8,400	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	34
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0
* = See laboratory report for additional fuel oxygenates detected. < = Indicates the laboratory test method detection limit. NS = Not sampled this quarter.							



Appendix F Continued

Date	Well ID	TPH as Gasoline	B	T	E	X	MtBE
		µg/L					
8/11/04	MW-1	6,800	1,200	<50	420	<50	280
	MW-2	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS
	MW-4	2,700	420	<10	66	84	620*
	MW-5	NS	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	NS	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	47,000	8,000	4,900	4,100	7,300	<100
	MW-8	<50	<1.0	<1.0	<1.0	<1.0	23
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0
11/17/04	MW-1	7,600	1,700	<5.0	540	12	430*
	MW-2	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-3	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-4	3,900	140	<10	230	67	480*
	MW-5	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-6	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	MW-7	42,000	8,900	7,300	4,600	9,200	100
	MW-8	72	<1.0	<1.0	<1.0	<1.0	160*
	MW-9	<50	<1.0	<1.0	<1.0	<1.0	<1.0
* = See laboratory report for additional fuel oxygenates detected. < = Indicates the laboratory test method detection limit. NS = Not sampled this quarter.							



Appendix F Continued

Date	Well ID	TPH as Gasoline	B	T	E	X	McBE**
		µg/L					
02/17/05	MW-1	20,000	4,700	<15*	2000	<25*	690
	MW-2	NS	NS	NS	NS	NS	NS
	MW-3	NS	NS	NS	NS	NS	NS
	MW-4	2,200	15	<6.0*	<10*	<10*	48
	MW-5	NS	NS	NS	NS	NS	NS
	MW-6	NS	NS	NS	NS	NS	NS
	MW-7	140,000	16,000	17,000	8,500	19,000	<50*
	MW-8	<50	<0.30	<0.30	<0.50	<0.50	66
	MW-9	<50	<0.30	<0.30	<0.50	<0.50	<0.50
05/25/05	MW-1	15,000	2,600	<15*	1000	<25*	630**
	MW-2	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	MW-3	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	MW-4	780	42	<3.0*	<5.0*	<5.0*	120**
	MW-5	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	MW-6	<50	<0.30	<0.30	<0.50	<0.50	<0.50
	MW-7	95,000	10,000	13,000	5,200	14,000	110
	MW-8	<50	<0.30	<0.30	<0.50	<0.50	6.5
	MW-9	<50	<0.30	<0.30	<0.50	<0.50	<0.50
<p>< = Indicates the laboratory test method detection limit.</p> <p>NS = Not sampled.</p> <p>* = The Reporting Limits for this analysis have been raised to account for matrix interference.</p> <p>** = Additional oxygenated fuel additives not detected at or above the laboratory test method detection limits.</p>							



APPENDIX G

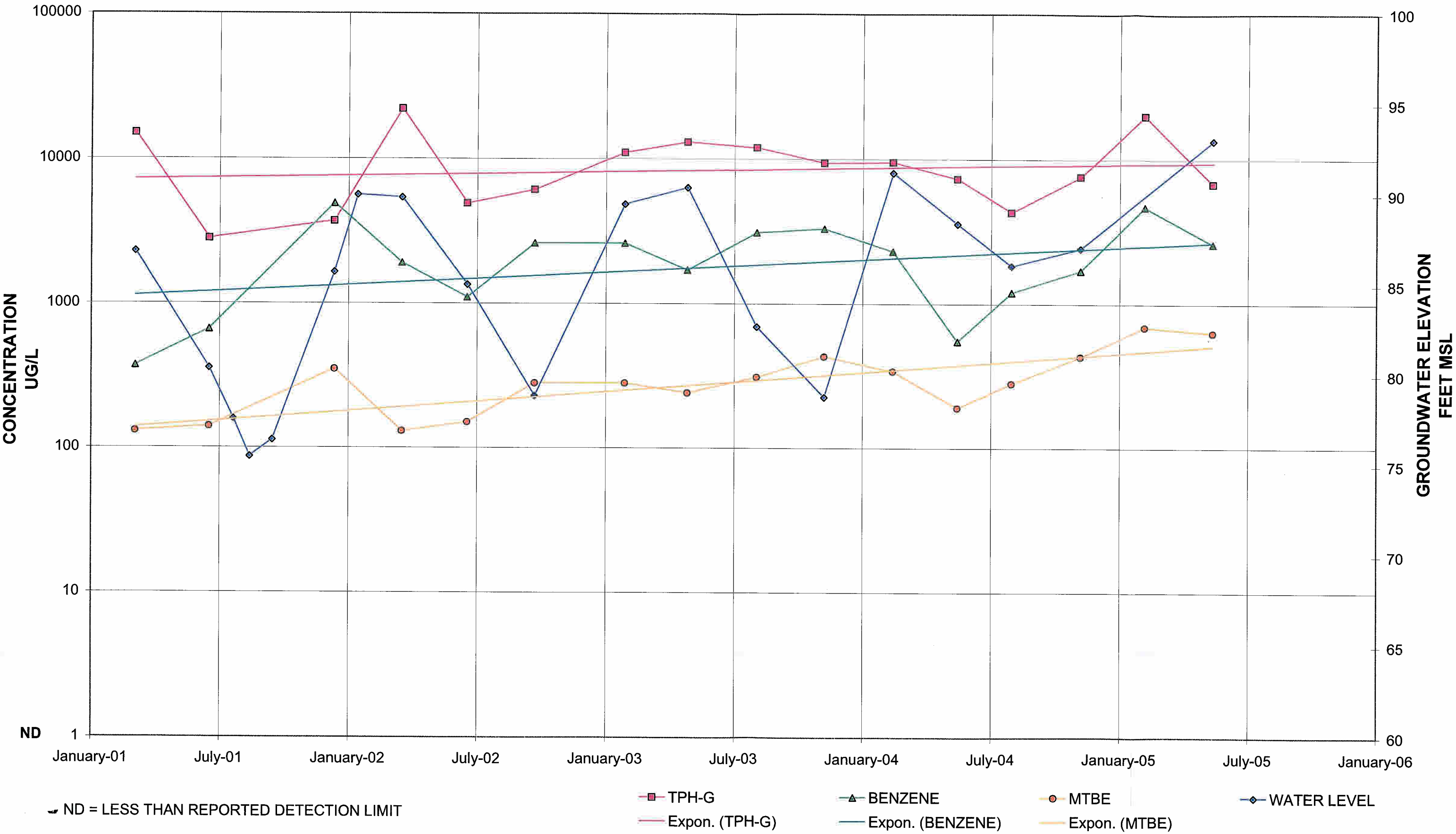
Appendix G - Historical Groundwater Sample Analytical Results - Deep Wells

Date	Well ID	TPH as Gasoline	B	T	E	X	MeBE
		µg/L					
11/19/04	MW-1D	57	<1.0	<1.0	<1.0	<1.0	18*
	MW-2D	1,600	53	3.4	87	16.9	110*
	MW-3D	<50	<1.0	<1.0	<1.0	<1.0	84*
02/17/05	MW-1D	<50	<0.30	<0.30	<0.50	<0.50	31
	MW-2D	<50	0.71	<0.30	<0.50	<0.50	52*
	MW-3D	<50	<0.30	<0.30	<0.50	<0.50	6.2*
05/25/05	MW-1D	<50	0.56	<0.30	<0.50	<0.50	41*
	MW-2D	<50	0.60	<0.30	<0.50	<0.50	2.1
	MW-3D	<50	0.64	<0.30	0.62	<0.50	12*
< = Indicates the laboratory test method detection limit. * = Additional oxygenated fuel additives have been detected (see laboratory reports).							

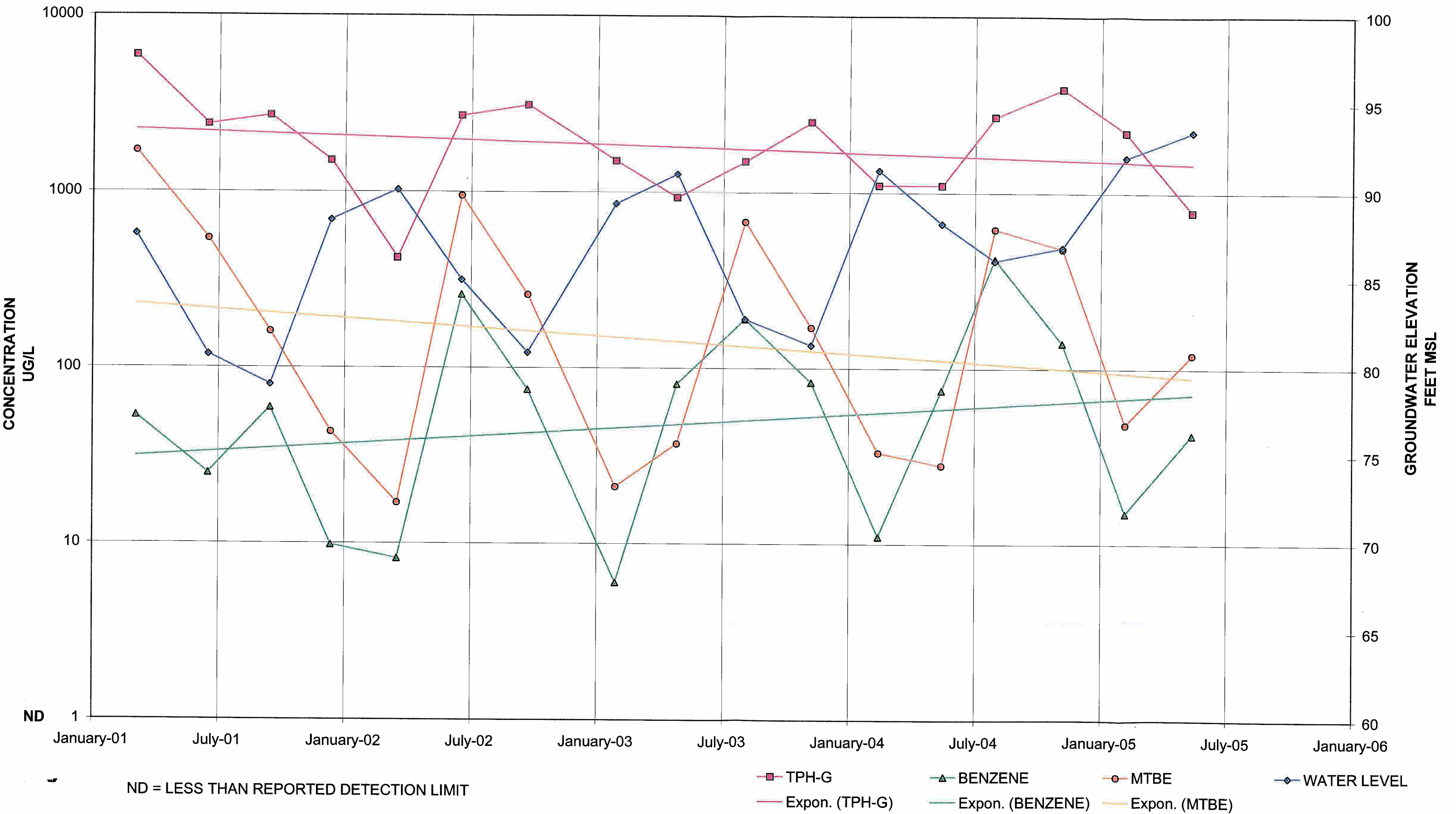


APPENDIX H

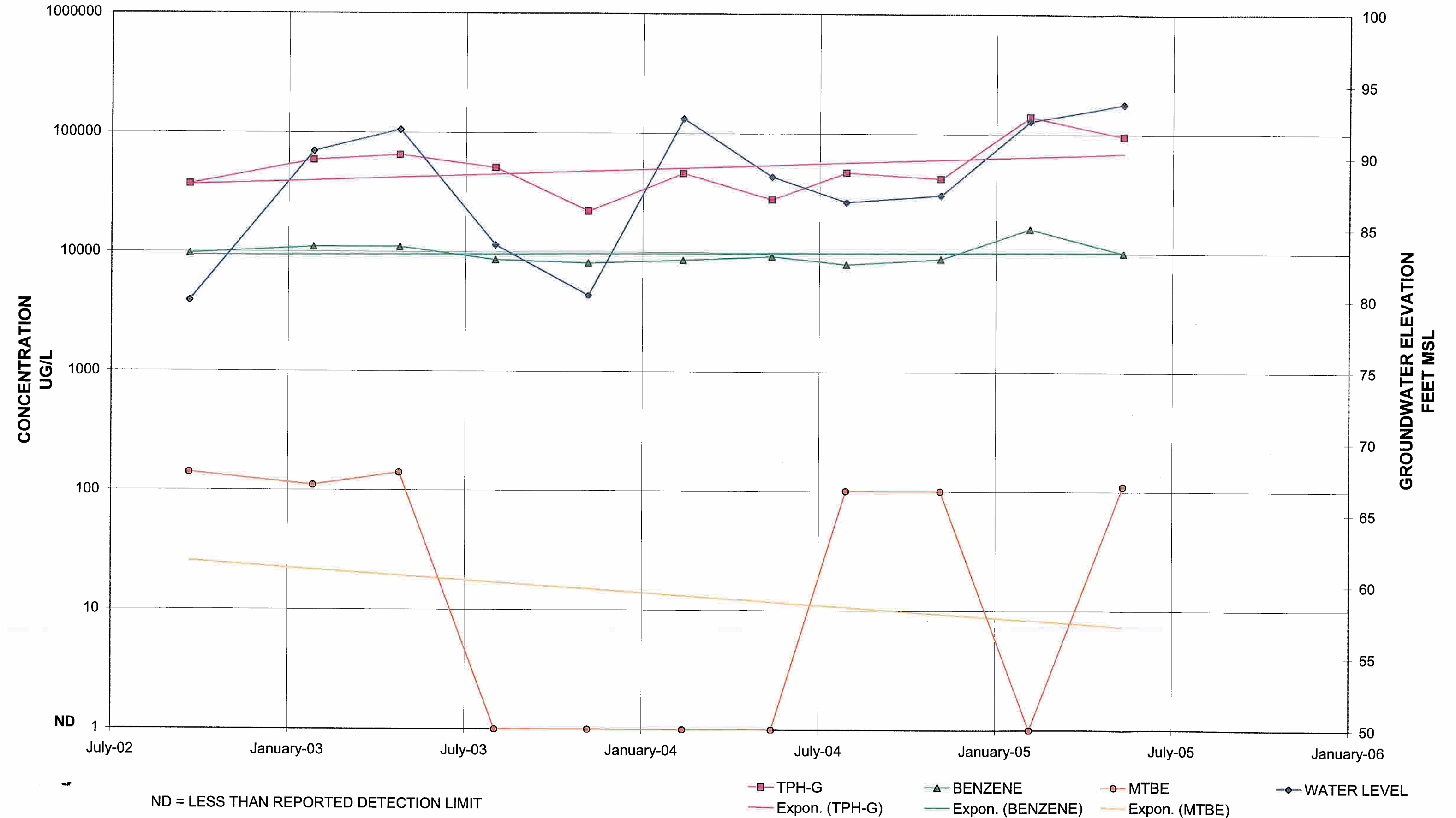
TIME vs. CONCENTRATION GRAPH MW-1
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



TIME vs. CONCENTRATION GRAPH MW-4
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



TIME vs. CONCENTRATION GRAPH MW-7
ROYAL COACH CAR WASH
7360 COMMERCE BLVD., ROHNERT PARK, CALIFORNIA



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